

Utah Health Status Update:

Potentially Preventable Hospital Readmissions

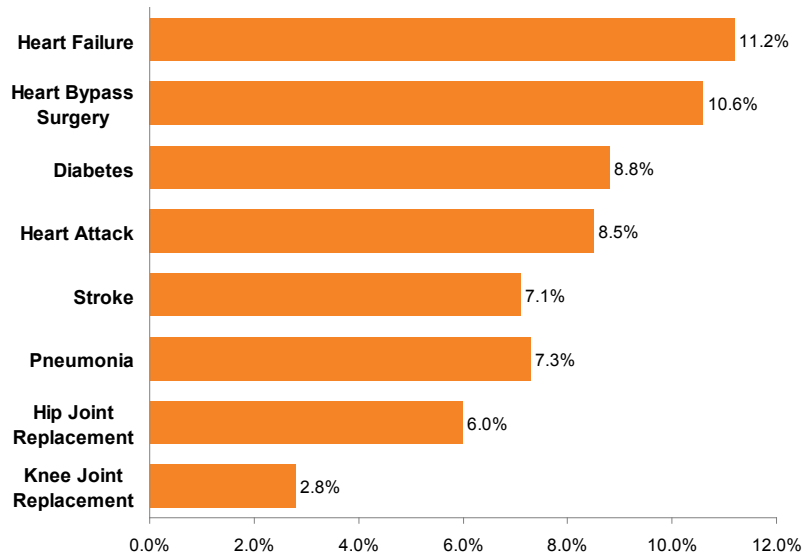
November 2010

Hospital readmissions can be costly and may indicate less than optimal quality of health care. From 2005 through 2007, more than 23,000 Utah adults—or an average of 21 people per day—were readmitted to an acute-care hospital for a clinically-related reason within 30 days of a previous hospital stay, as defined by the 3M Potentially Preventable Readmissions software. A recent report, “Readmissions to Utah Hospitals for Years 2005–2007,” by the Utah Health Data Committee examined potentially preventable hospital readmissions (PPR) for 16 medical conditions and procedures using patient-linked hospital discharge data from the Utah Hospital Discharge Database.

The potentially preventable readmission overall rate was 7.3% (23,354 readmissions out of 321,160 hospital admissions at risk for readmissions) for approximately 300 3M All

Potentially Preventable Readmission Overall

Figure 1. Overall actual rate of potentially preventable readmission within 30 days by medical condition or procedure, Utah, 2005–2007



- From 2005 through 2007, more than 23,000 Utah adults—or an average of 21 people per day—were readmitted to an acute-care hospital for a clinically-related reason within 30 days of a previous hospital stay.
- Potentially preventable readmission rates varied considerably by patients’ medical condition and procedure.
- The highest rates were found among patients having heart procedures.
- Compared to Florida, Utah had lower readmission rates for heart attack, heart bypass surgery, heart failure, pneumonia, and hip joint replacement.
- For each of the 16 conditions and procedures in this report, most hospitals had about the same actual percentage of readmitted patients as expected.
- To read the entire report, please see <http://health.utah.gov/myhealthcare/reports/readmission/index.php>.

Patient Refined Diagnosis Related Groups (APR-DRGs), combined for all adult Utah residents. APR-DRGs, developed by 3M, are a widely used classification of hierarchical, mutually exclusive medical conditions and procedures. Admissions at risk for readmission exclude maternity and newborn cases, patients who left the hospital against medical advice during a previous hospital stay, transfer patients, and patients for whom readmission is part of an accepted plan of care, such as patients with advanced cancer, multiple trauma, and severe burns. This study also excluded patients younger than 18 years of age. However, potentially preventable readmission rates varied considerably by patients’ medical condition and procedure (see Figure 1).

The report compares readmission rates for diabetes care, heart and stroke care, hip and knee care, and pneumonia care. The highest rates were found among patients having heart procedures. While no national readmission rates are currently available, Florida has released readmission findings using the same method used for the Utah Department of Health report, and several other states are adopting this method. Compared to Florida, Utah had lower readmission rates for heart attack, heart bypass surgery, heart failure, pneumonia, and hip joint replacement.

For each of the 16 conditions and procedures in this report, most hospitals had about the same actual percentage of readmitted patients as expected. A hospital’s expected percentage of readmitted patients was based on the number of patients expected to be readmitted if the hospital treated the same portion of patients as Utah overall in each of four levels for severity of illness for each condition or procedure.

For Hip Joint Replacement (as defined by APR-DRG 301), for example, among the 26 Utah short-term, acute-care hospitals that treated at least 30 hip joint replacement patients at risk for readmission, two hospitals had a lower rate and four hospitals had a higher rate of potentially preventable readmissions than expected (see Table 1). Specifically, McKay-Dee Hospital Center had an actual rate of 3.4%, compared to its expected rate of 5.9%. Alta View Hospital had an actual rate of 9.3%, compared to its expected rate of 5.6%. The remaining 20 hospitals had about the same actual rate as expected, based on the 95% Exact Confidence Interval as a test of whether the difference in the actual and expected rates was statistically significant.

The report on potentially preventable readmissions is not intended or implied to be a substitute for professional medical advice. However, its findings can serve as a spring board for discussions between patients and their health care providers, hospitals, health care plans, legislators, policy makers, and other stakeholders in the cost and quality of health care in Utah.

To read the entire report, please see <http://health.utah.gov/myhealthcare/reports/readmission/index.php>.

Hip Joint Replacement

Table 1. Hip joint replacement (APR-DRG 301) across hospital readmissions among Utah resident inpatients age 18 years and older, 2005–2007

| Hospital | At Risk for Readmission | Actual % Readmitted Patients | Expected % Readmitted Patients | Statistical Rating |
|--|-------------------------|------------------------------|--------------------------------|--------------------|
| Utah Overall | 8,435 | 6.0% | 6.0% | ** |
| Alta View Hospital | 225 | 9.3% | 5.6% | * |
| American Fork Hospital | 146 | 8.2% | 5.7% | ** |
| Brigham City Community Hospital | 66 | 1.5% | 5.5% | ** |
| Cache Valley Specialty Hospital | 93 | 5.4% | 5.8% | ** |
| Castleview Hospital | 99 | 9.1% | 6.1% | ** |
| Cottonwood Hospital (closed) | 164 | 4.9% | 5.9% | ** |
| Davis Hospital & Medical Center | 148 | 9.5% | 5.6% | ** |
| Dixie Regional Medical Center | 714 | 6.6% | 5.8% | ** |
| Jordan Valley Medical Center | 100 | 6.0% | 5.7% | ** |
| Lakeview Hospital | 360 | 5.6% | 5.9% | ** |
| LDS Hospital | 1,194 | 6.1% | 6.1% | ** |
| Logan Regional Hospital | 158 | 3.8% | 5.8% | ** |
| McKay-Dee Hospital Center | 638 | 3.4% | 5.9% | *** |
| Mountain View Hospital | 233 | 4.3% | 6.0% | ** |
| Ogden Regional Medical Center | 212 | 5.7% | 5.6% | ** |
| Pioneer Valley Hospital | 78 | 15.4% | 5.8% | * |
| Salt Lake Regional Medical Center | 75 | 6.7% | 5.9% | ** |
| St. Mark's Hospital | 933 | 4.4% | 5.8% | ** |
| The Orthopedic Specialty Hospital | 764 | 4.1% | 6.1% | *** |
| Timpanogos Regional Hospital | 148 | 4.7% | 6.6% | ** |
| Uintah Basin Medical Center | 71 | 2.8% | 5.5% | ** |
| University of Utah Hospital | 595 | 9.7% | 6.4% | * |
| University Orthopaedic Center | 68 | 1.5% | 5.3% | ** |
| Utah Valley Regional Medical Center | 692 | 7.5% | 6.5% | ** |
| Valley View Medical Center | 221 | 3.6% | 5.6% | ** |
| Veterans Administration Medical Center | 135 | 11.1% | 6.2% | * |

Across hospital readmissions are readmitted patients who were readmitted to this hospital or another hospital within 30 days of leaving a hospital for a related reason.

Among the 26 hospitals that treated at least 30 patients at risk for readmission from 2005-2007, 2 had a lower Actual % Readmitted Patients (***) and 4 had a higher Actual % Readmitted Patients (*), while the remaining hospitals had an Actual % Readmitted about the same as the Expected % Readmitted Patients (*), based on Exact 95% Confidence Intervals.

Statistical Rating: based on the Exact 95% Confidence Interval test of statistical significance.

*** Lower % than expected, ** same % as expected, * higher % than expected.

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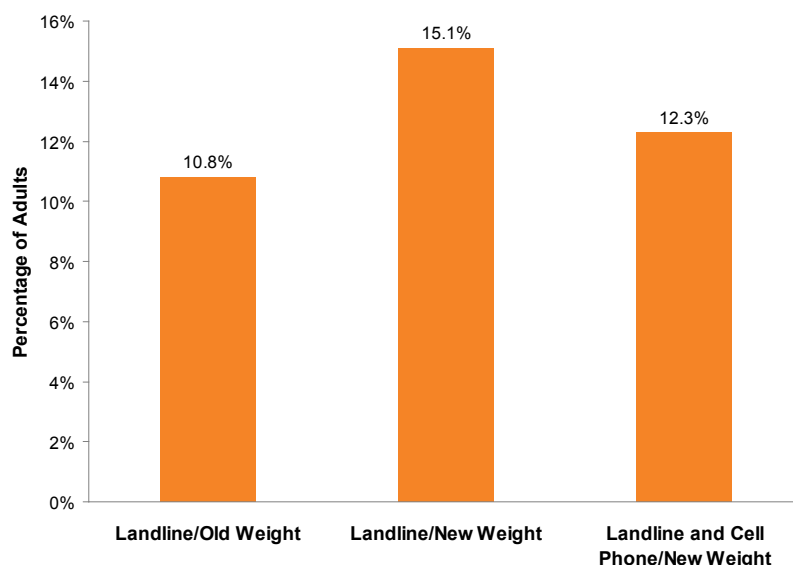
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Breaking News, October 2010

Recent Improvements to the Utah Behavioral Risk Factor Surveillance System Methodology

For the first time in the history of the Behavioral Risk Factor Surveillance System (BRFSS), starting with the 2009 survey, the data are now available for a combined sample of landline and cell phone interviews. In addition, survey researchers developed a new data weighting method that can be used with this combined dataset and better accounts for differences between the people surveyed compared to the general population. The purpose of the Utah BRFSS survey is to obtain data on health-related behaviors, health status, and healthcare access for Utah adults and children. The Utah Department of Health (UDOH), in partnership with the Centers for Disease Control and Prevention (CDC), has collected this information continuously since 1984 using landline telephone interviews. In recent years, there has been a steady and rapid increase in the percentage of people who live in cell phone-only households, especially in Utah. And studies have shown that there are differences in some of the BRFSS measures between people in households with landlines compared to those in cell phone-only households. To address these issues, the UDOH Survey Center started cell phone interviews in 2009. We believe that these improvements to the BRFSS will better allow it to represent the Utah population on these important public health measures.

Percentage of Adults With Fair or Poor Health, Utah BRFSS, 2009



Community Health Indicators Spotlight, October 2010

New Mammography Recommendations

In April 2010, the Utah Department of Health (UDOH) brought together local experts and community partners to discuss the U.S. Preventive Services Task Force (USPSTF) recommendations on breast cancer screening. As a result of the meeting, and additional internal meetings, the UDOH recommends the following breast cancer screening guidelines for the state of Utah:

The Utah Department of Health (UDOH) recommends that all Utah women age 40 and older should continue to get regular mammograms.

The UDOH strongly supports the USPSTF in emphasizing that mammography is a proven and effective way to detect breast cancer and prevent breast cancer deaths. All women who undergo mammography should receive information about its benefits and risks and Utah women are encouraged to discuss the recommendations of their personal doctor who knows their personal and family health history. The UDOH also recommends that women continue to check their own breasts and report any breast change promptly to their doctor.

In 2007 out of 1,145 Utah women who were diagnosed with breast cancer 22% or 257 were diagnosed before the age of 50.¹ Utah's mammogram screening rate (Utah: 67.2%) is one of the lowest in the nation (U.S.: 76.2%). Everyone in Utah needs to help inform and encourage women over 40 to get their mammograms.

¹ Utah Cancer Registry. Retrieved from IBIS on August 19, 2010.

Monthly Health Indicators Report

(Data Through September 2010)

| Monthly Report of Notifiable Diseases, September 2010 | Current Month # Cases | Current Month # Expected Cases (5-yr average) | # Cases YTD | # Expected YTD (5-yr average) | YTD Standard Morbidity Ratio (obs/exp) |
|---|---|---|-------------|-------------------------------|--|
| Campylobacteriosis (Campylobacter) | 13 | 27 | 318 | 260 | 1.2 |
| Shiga toxin-producing Escherichia coli (E. coli) | 4 | 16 | 64 | 95 | 0.7 |
| Hepatitis A (infectious hepatitis) | 0 | 1 | 7 | 10 | 0.7 |
| Hepatitis B, acute infections (serum hepatitis) | 0 | 1 | 5 | 15 | 0.3 |
| Influenza* | Weekly updates at http://health.utah.gov/epi/diseases/flu | | | | |
| Meningococcal Disease | 0 | 1 | 1 | 8 | 0.1 |
| Pertussis (Whooping Cough) | 1 | 40 | 172 | 332 | 0.5 |
| Salmonellosis (Salmonella) | 23 | 28 | 258 | 268 | 1.0 |
| Shigellosis (Shigella) | 3 | 4 | 32 | 33 | 1.0 |
| Varicella (Chickenpox) | 11 | 40 | 232 | 518 | 0.4 |
| Quarterly Report of Notifiable Diseases, 3rd Qtr 2010 | Current Quarter # Cases | Current Quarter # Expected Cases (5-yr average) | # Cases YTD | # Expected YTD (5-yr average) | YTD Standard Morbidity Ratio (obs/exp) |
| HIV/AIDS† | 10 | 29 | 60 | 95 | 0.6 |
| Chlamydia | 1,536 | 1,418 | 4,812 | 2,744 | 1.2 |
| Gonorrhea | 75 | 159 | 252 | 488 | 0.5 |
| Tuberculosis | 1 | 8 | 14 | 25 | 0.6 |
| Medicaid Expenditures (in Millions) for the Month of September 2010 | Current Month | Expected/Budgeted for Month | Fiscal YTD | Budgeted Fiscal YTD | Variance - over (under) budget |
| Capitated Mental Health | \$ 7.8 | \$ 10.5 | \$ 35.6 | \$ 25.6 | \$ 10.0 |
| Inpatient Hospital | \$ 18.7 | \$ 23.5 | \$ 48.9 | \$ 55.7 | \$ (6.8) |
| Outpatient Hospital | \$ 8.1 | \$ 10.1 | \$ 19.6 | \$ 25.7 | \$ (6.2) |
| Long Term Care | \$ 13.8 | \$ 15.2 | \$ 36.7 | \$ 38.6 | \$ (1.9) |
| Pharmacy‡ | \$ 12.1 | \$ 14.9 | \$ 35.5 | \$ 45.6 | \$ (10.1) |
| Physician/Osteo Services | \$ 6.2 | \$ 6.9 | \$ 15.3 | \$ 17.2 | \$ (1.9) |
| TOTAL HCF MEDICAID | \$ 111.4 | \$ 144.2 | \$ 323.7 | \$ 365.1 | \$ (41.4) |

| Program Enrollment for the Month of September 2010 | Current Month | Previous Month | % Change\$ From Previous Month | 1 Year Ago | % Change\$ From 1 Year Ago |
|--|-------------------------|-------------------------------|--------------------------------|-------------------------------|----------------------------|
| Medicaid | 226,181 | 225,703 | +0.2% | 201,392 | +12.3% |
| PCN (Primary Care Network) | 14,225 | 14,620 | -2.7% | 20,782 | -31.6% |
| CHIP (Children's Health Ins. Plan) | 40,675 | 40,975 | -0.7% | 41,025 | -0.9% |
| Health Care System Measures | Annual Visits | | Annual Charges | | |
| Number of Events | Rate per 100 Population | % Change\$ From Previous Year | Total Charges in Millions | % Change\$ From Previous Year | |
| Overall Hospitalizations (2008) | 279,504 | 9.4% | -2.7% | \$ 4,703.3 | +10.3% |
| Non-maternity Hospitalizations (2008) | 164,602 | 5.4% | -3.0% | \$ 3,924.7 | +10.4% |
| Emergency Department Encounters (2008) | 681,958 | 23.4% | -2.9% | \$ 879.5 | +12.6% |
| Outpatient Surgery (2008) | 299,958 | 10.3% | -1.9% | \$ 1,277.7 | +15.2% |
| Annual Community Health Measures | Current Data Year | Number Affected | Percent/Rate | % Change\$ From Previous Year | State Rank¶ (1 is best) |
| Obesity (Adults 18+) | 2009 | 465,600 | 24.0% | +3.9% | 11 (2009) |
| Cigarette Smoking (Adults 18+) | 2009 | 190,300 | 9.8% | +5.4% | 1 (2009) |
| Influenza Immunization (Adults 65+) | 2009 | 174,400 | 68.8% | -6.2% | 33 (2009) |
| Health Insurance Coverage (Uninsured) | 2009 | 314,300 | 11.2% | +4.7% | n/a |
| Motor Vehicle Traffic Crash Injury Deaths | 2009 | 227 | 8.1 / 100,000 | -16.6% | 15 (2007) |
| Poisoning Deaths | 2009 | 543 | 19.4 / 100,000 | +7.0% | 49 (2007) |
| Suicide Deaths | 2009 | 445 | 15.9 / 100,000 | +15.3% | n/a |
| Diabetes Prevalence (Adults 18+) | 2009 | 118,500 | 6.1% | +0.2% | 11 (2009) |
| Poor Mental Health (Adults 18+) | 2009 | 291,600 | 15.0% | +7.0% | 19 (2009) |
| Coronary Heart Disease Deaths | 2009 | 1,469 | 52.5 / 100,000 | -4.4% | 2 (2006) |
| All Cancer Deaths | 2009 | 2,543 | 90.8 / 100,000 | +1.1% | 1 (2006) |
| Stroke Deaths | 2009 | 734 | 26.2 / 100,000 | -2.2% | 7 (2006) |
| Births to Adolescents (Ages 15-17) | 2008 | 1,122 | 18.5 / 1,000 | -0.6% | 22 (2007) |
| Early Prenatal Care | 2008 | 43,997 | 79.1% | -0.4% | n/a |
| Infant Mortality | 2008 | 264 | 4.7 / 1,000 | -7.9% | 4 (2007) |
| Childhood Immunization (4:3:1:3:3:1) | 2009 | 41,500 | 76.6% | +4.1% | 16 (2009) |

* Influenza activity remains minimal in Utah. Influenza-like illness activity is below baseline statewide. As of October 20, 2010, 2 influenza-associated hospitalizations have been reported to the UDOH. More information can be found at <http://health.utah.gov/epi/diseases/flu>.

† Diagnosed HIV infections, regardless of AIDS diagnosis.

‡ The Pharmacy Expenditure and Budget amount only includes the gross pharmacy costs. The Pharmacy Rebate and Pharmacy Part-D amounts are excluded from this line item.

§ % Change could be due to random variation.

¶ State rank based on age-adjusted rates.

Notes: Data for notifiable diseases are preliminary and subject to change upon the completion of ongoing disease investigations. Active surveillance for West Nile virus has ended until the 2011 season.